

Application No. 09/934,640
Paper dated October 17, 2003
In reply to USPTO Correspondence of June 18, 2003
Attorney Docket No. 3419-011158

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-27 (cancelled)

Claim 28 (original): A method for manufacturing a sealed recuperator unit comprising the steps of:

- (a) providing a first section having an embossment;
- (b) providing a second section;
- (c) placing a corrugated member in the embossment;
- (d) placing the second section over the first section; and
- (e) welding said first section to said second section thereby forming a sealed recuperator unit.

Claim 29 (original): A method as set forth in claim 28, further comprising the steps of:

- (f) forming a fluid inlet in said sealed recuperator unit; and
- (g) forming a fluid outlet in said sealed recuperator unit.

Claim 30 (original): A method as set forth in claim 29, further comprising the step of:

brazing said corrugated member to said first section and said second section.

Claim 31 (original): A method as set forth in claim 28, further comprising the step of:

welding a front member having a fluid inlet and a fluid outlet to the first section and the second section.

Claims 32-41 (cancelled)

Claim 42 (amended): A method as claimed in claim ~~41~~ 49, wherein the heating is accomplished through a flame.

Claim 43 (amended): A method as claimed in claim ~~41~~ 49, wherein said heating is accomplished through an arc welder.

Claim 44 (amended) A method as claimed in claim ~~41~~ 49, wherein the welded joint is a fluid tight welded joint.

Claims 45-46 (cancelled)

Claim 47 (original) A method as set forth in claim 28 further comprising the steps of:

curving said first section; and
curving said second section.

Claim 48 (cancelled)

Claim 49 (new) A method for forming a joint on a recuperator unit, comprising the steps of:

(a) providing a recuperator unit having a body defining an outer surface and an inner surface wherein the inner surface defines a flow chamber, said recuperator unit having a metallic lip in fluid communication with the flow chamber, the metallic lip having a first thickness;

(b) providing a second metallic member having a slot for receipt of the metallic lip, said second metallic member having a second thickness, the second thickness is greater than the first thickness;

(c) placing the metallic lip within the slot so that a tip of the lip extends beyond the slot;

(d) heating the tip until the tip melts;

(e) heating the second metallic member adjacent the tip so that the melted tip causes the metallic lip to weld to the second metallic member about the lip; and

(f) permitting the metallic lip and the second metallic member to cool, thereby forming a welded joint about the metallic lip.

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Claim 50 (new) A method for forming a joint on a recuperator unit, comprising the steps of:

a) providing a recuperator unit having a body defining an outer surface and an inner surface wherein the inner surface defines a flow chamber, said recuperator unit having a metallic lip in fluid communication with the flow chamber, the metallic lip having a first thickness;

b) providing a second metallic member having a second lip, said second metallic member having a thickness, the second thickness is greater than the first thickness;

c) placing said first metallic lip within said second lip so that a tip of the first metallic lip extends beyond the second lip;

d) heating the tip until the tip melts;

e) heating the second metallic member adjacent the tip so that the melted tip causes the sealed recuperator unit to weld to the second metallic member about the first metallic lip; and

f) permitting the first metallic lip and the second metallic member to cool, thereby forming a welded joint about the first metallic lip.